WHAT IS CLAIMED IS:

1. An IC card terminal unit comprising:

communication means for communicating data between two IC cards in one of which at least a key for encoding or decoding data is stored and in the other of which the key is not stored;

key takeout means for taking out the key in the former IC card through the communication means by transmitting a key takeout instruction to the former IC card in which the key is stored through the communication means; and

encoding-key setting means for storing the key in the above latter IC card by transmitting an encoding-key setting instruction to which the key taken out of the former IC card by the key takeout means to the latter IC card in which the key is not stored through the communication means.

2. An IC card terminal unit comprising:

communication means for communicating data between two IC cards;

first key setting means for storing a second key for encoding or decoding a first key in the two IC cards respectively by transmitting a key setting instruction to which the second key is added to the two IC cards through the communication means;

confirmation means for confirming whether setting of the second key by the first key setting means

normally ends;

key generation means for generating the first key for encoding or decoding data in the former IC card by transmitting a key generation instruction to one of the two IC cards through the communication means when it is confirmed by the confirmation means that setting of the second key normally ends;

key takeout means for taking out the first key generated in the former IC card generating the first key by the key generation means through the communication means by transmitting a key takeout instruction to the former IC card through the communication means; and

second key setting means for storing the first key in the latter IC card by transmitting an encoding-key setting instruction to which the first key taken out of the former IC card by the key takeout means is added to the latter IC card of the two IC cards.

3. An IC card duplication method using a first IC card to be duplicated in which at least a key for encoding or decoding data is stored, a duplicating second IC card, and

a terminal unit for handling these first and second IC cards, comprising:

a first step of transmitting a key takeout instruction from the terminal unit to the first IC card;

a second step of receiving a key takeout

instruction transmitted from the terminal unit and

transmitting the key to the terminal unit in the first

IC card;

5   a third step of receiving a key transmitted from

the first IC card and transmitting an encoding-key

setting instruction to which the received key is added

to the second IC card in the terminal unit; and

a fourth step of receiving the encoding-key

10   setting instruction transmitted from the terminal unit

and storing a key added to the encoding-key setting

instruction.

4.   The IC card duplication method according to

claim 3, wherein

15   the key for encoding or decoding the data stored

in the first IC card is generated in the first IC card

in accordance with the key generation instruction input

from the terminal unit.

5.   The IC card duplication method according to

20   claim 3, wherein

the key for encoding or decoding the data stored

in the first IC card is generated by an external unit

and input through the terminal unit.

6.   An IC card duplication method using a first IC

25   card to be duplicated in which at least a first key for

encoding or decoding data is stored, a duplicating

second IC card, and a terminal unit for handling these

first and second IC cards, comprising:

a first step of transmitting a key-setting instruction to which a second key for encoding or decoding the first key is added from the terminal unit to the first and second IC cards;

a second step of receiving the key-setting instruction transmitted from the terminal unit and storing the second key added to the key-setting instruction in the first and second IC cards;

a third step of transmitting a key takeout instruction from the terminal unit to the first IC card;

a fourth step of receiving the key takeout instruction transmitted form the terminal unit, encoding the first key by the second key stored in the second step, and transmitting the encoded first key to the terminal unit in the first IC card;

a fifth step of receiving the encoded first key transmitted from the first IC card and transmitting an encoding-key setting instruction to which the received encoded first key is added to the second IC card in the terminal unit; and

a sixth step of receiving the encoding-key setting instruction transmitted from the terminal unit, decoding the encoded first key added to the encoding-key setting instruction by the second key stored in the second step, and storing the decoded first key in the

second IC card.

7. The IC card duplication method according to claim 6, wherein

the first key for encoding or decoding the data stored in the first IC card is generated in the first IC card in accordance with a key generation instruction input from the terminal unit in the first IC card.

8. The IC card duplication method according to claim 6, wherein

the first key for encoding or decoding the data stored in the first IC card is generated by an external unit and input through the terminal unit.

9. An IC card processing system comprising first and second IC cards in each of which a preset first key is entered and an IC card processor for transferring data to and from the first and second IC cards, wherein

the IC card processor is constituted of;

first setting means for setting second and third keys,

first output means for outputting second and third keys set by the first setting means to the first and second IC cards,

second output means for outputting encoded data of an encoding key obtained from the first IC card to the second IC card in response to an output of the first output means,

third output means for outputting data to be

encoded to the first IC card,

storage means for storing encoded data of the data
to be encoded obtained from the first IC card in
response to an output of the third output means,

5   fourth output means for outputting the encoded
data of the data to be encoded stored in the storage
means to the first IC card,

fifth output means for displaying or printing the
decoded data of the data to be encoded obtained from

10   the first IC card in response to an output of the
fourth output means,

sixth output means for outputting the encoded data
of the data to be encoded stored in the storage means
to the second IC card when a trouble occurs in the

15   first IC card, and

seventh output means for displaying or printing
the decoded data of the data to be encoded obtained
from the second IC card in response to an output of the
sixth output means;

20   the first IC card is constituted of

first entry means for entering second and third
keys supplied from the IC card processor,

first generation means for generating an encoding
key in accordance with the second and third keys

25   entered by the first entry means and the first key,

first conversion means for converting an encoding
key generated by the first generation means into

encoded data in accordance with the first to third keys,

eighth output means for outputting the encoded data of an encoding key supplied from the first conversion means to the IC card processor,

5   second conversion means for converting the data to be encoded supplied from the IC card processor encoded data by an encoding key generated by the first generation means,

ninth output means for outputting the encoded data

10   of an encoding key supplied from the second conversion means to the IC card processor,

first decoding means for decoding the encoded data of the data to be encoded supplied from the IC card processor by an encoding key generated by the first

15   generation means, and

tenth output means for outputting the decoded data of the data to be encoded supplied from the first decoding means to the IC card processor; and

the second IC card is constituted of

20   second entry means for entering second and third keys supplied from the IC card processor and the encoded data of an encoding key,

second decoding means for decoding the encoded data of the data to be encoded supplied from the IC

25   card processor in accordance with the first to third keys due to a trouble of the first IC card, and

eleventh output means for outputting the decoded

data of the data to be encoded supplied from the second decoding means to the IC card processor.